

REMARKS

Applicants appreciate the thorough examination of the present application that is reflected in the non-final Official Action of June 12, 2006. The sole ground of rejection of Claims 1-9 and 29 is a provisional obviousness-type double patenting rejection based on Claims 9-17 of copending and commonly assigned U.S. Patent Application No. 10/897,858 to Ryals et al. (hereinafter "Ryals").

Although it would be relatively straightforward for Applicants to file a terminal disclaimer to overcome the rejection, Applicants respectfully submit that the obviousness-type double patenting rejection is inappropriate and, therefore, request the Examiner to reconsider this rejection. In particular, Applicants agree with the Examiner that both applications may be involved in "bypassing a load coil", as stated in the Official Action; however, Applicants submit that the techniques described in Ryals and the present application are patentably distinct, as discussed below.

For example, Claim 9 of Ryals recites "blocking the low frequency signal" and "routing the high frequency signal over a first communications path to bypass the load coil". More particularly, as described in Ryals:

[0023] From operation 310, the routine 300 continues to operation 320 where the high frequency or DSL signal 80 is routed through a high pass filter (i.e., the capacitor 52) to bypass the load coil 40. In particular, as the multichannel signal 70 crosses the terminals of the capacitor 52, the DSL signal is routed over the capacitor 52 while the low frequency or POTS voice signal 85 is blocked by the capacitor 52. The routine 300 then continues from operation 320 to operation 330.

[0024] At operation 330, the low frequency signal 85 is routed through a low pass filter (i.e., the inductor 62) to the load coil 40. In particular, the low frequency signal 85 from the multichannel signal 70 crosses the terminals of the capacitor 52 and continues over the inductor 62 where the signal is routed to the load coil 40 through the interface 96 for line conditioning. The routine 300 then continues from operation 330 to operation 340.

Ryals, Paragraphs 0023 and 0024 (*emphasis added*). In other words, to bypass the load coil 40, the multichannel signal 70 is provided to the capacitor 52, which acts as a high-pass filter that allows the high frequency signal 80 but blocks the low frequency signal 85. Thus, as described in Ryals, a high pass filter 52 is used to bypass the load coil 40. *See also* Ryals, Fig. 2.

In contrast, Claim 1 of the present application recites:

1. A method for constructing a transmission line unit wherein load coils can be selectively connected to a transmission line, comprising:
providing a transmission line section having a transmission line and a plurality of load coils electrically connected thereto; and
connecting a switch terminal having a plurality of switches to the transmission line section, each of the switches electrically connected to a respective load coil and configured to selectively connect the respective load coil to the transmission line. (*Emphasis added*).

Also, Claim 9 of the present application recites:

9. A method for selectively connecting load coils to a transmission line, comprising:
providing a transmission line section having a transmission line and a plurality of load coils electrically connected thereto;
connecting a switch terminal having a plurality of switches to the transmission line section, each of the switches electrically connected to a respective load coil; and
activating each switch to a first position or a second position, wherein the first switch position connects the respective load coil in series with the transmission line, and wherein the second switch position disconnects the respective load coil from the transmission line to selectively connect the load coil to the transmission line. (*Emphasis added*).

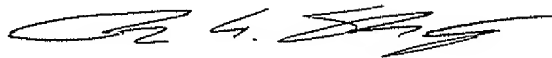
Accordingly, the present application describes connecting a switch terminal including a plurality of switches to selectively connect a load coil to a transmission line (Claim 1), and more particularly, activating each switch to a first or second position to respectively connect or disconnect the load coil (Claim 9). As such, Applicants submit that the present application provides independent techniques for bypassing a load coil using one or more switches to electrically disconnect the load coil from the transmission line, which are patentably distinct from blocking the low frequency signals and allowing the high frequency signals to bypass the load coil using a high pass filter, as described in Ryals. The fact that they may both address problems regarding the effects of load coils on DSL and/or other high-frequency signal transmission does not make these inventions obvious variants of one another. Moreover, Applicants respectfully submit that it would not be obvious to modify the switch terminal recited in Claims 1 and/or 9 of the present application to block the low frequency signals (as recited in Claim 9 of Ryals), as doing so would prevent the transmission of the low frequency signals over the transmission line in some embodiments of the present invention, which may defeat a well-known benefit of DSL service, *i.e.*, the simultaneous

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transmission of both voice (at low frequencies) *and* data (at high frequencies) on a shared transmission line.

In view of the above, Applicants respectfully request withdrawal of the outstanding rejection under the judicially created doctrine of obviousness-type double patenting as to independent Claims 1 and 9, as well as dependent Claims 2-8 and 29 that depend therefrom, and allowance of the present application.

Respectfully submitted,



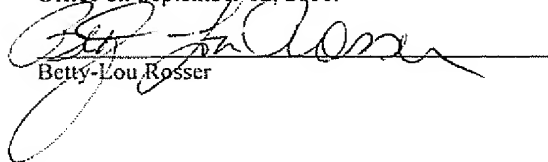
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UNDER 37 CFR § 1.8**

I hereby certify that this correspondence is being transmitted electronically to the U.S. Patent and Trademark Office on September 12, 2006.


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